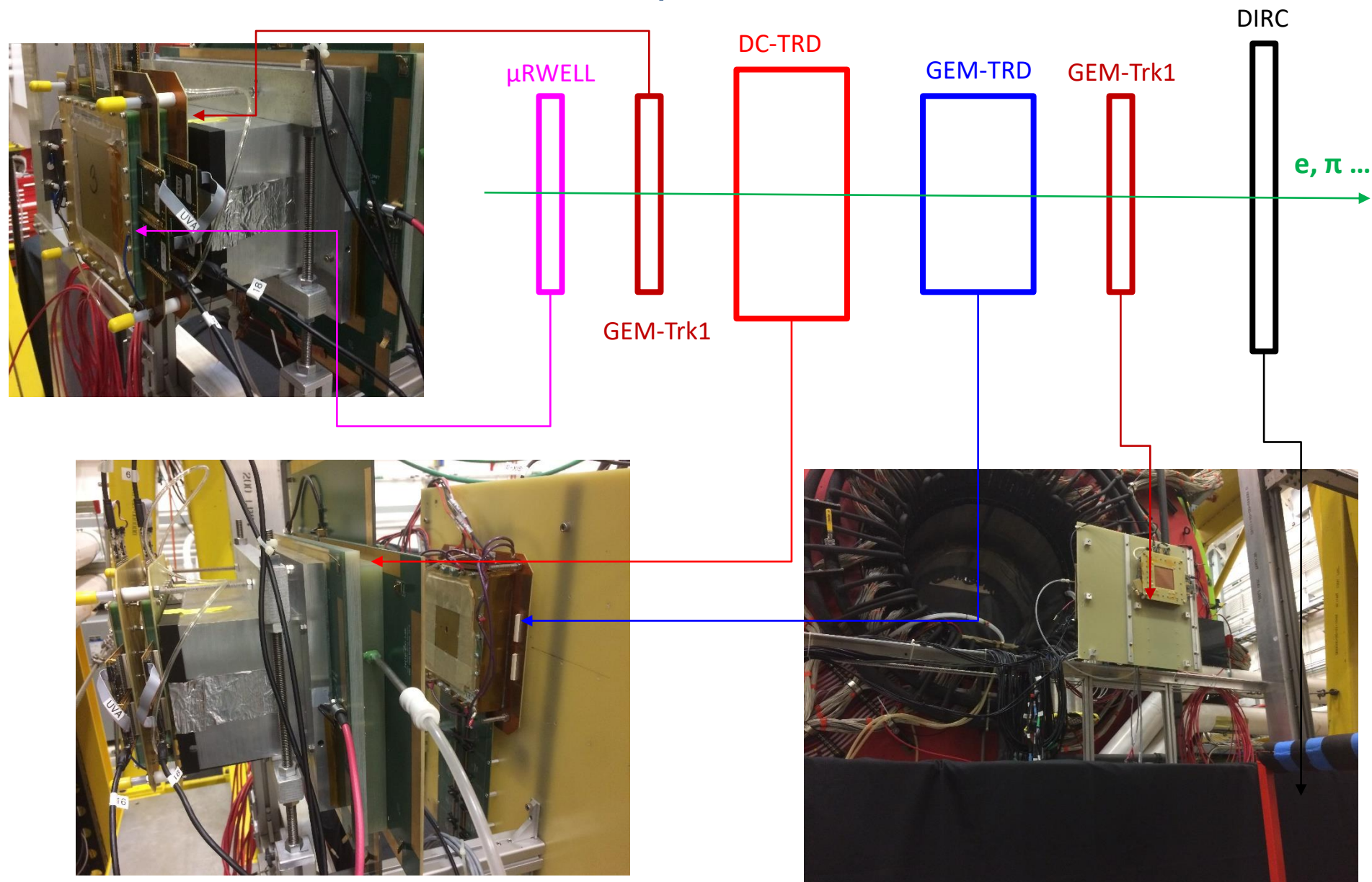


X-Y strips μ RWELL prototype in test beam in Hall D @ JLab

Kondo Gnanvo

EIC Weekly Meeting, Nov 11, 2019

Test beam Setup in Hall D @ JLab



Test beam Setup in Hall D @ JLab

- **Primary goal** (from Hall D point of view): commissioning of DIRC detector
 - Need tracking as seed for the DIRC \Rightarrow provided by 2 UVa standard $10\text{ cm} \times 10\text{ cm}$ standard triple-GEMs
 - Additional e/π separation info for DIRC commissioning \Rightarrow UVa GEM-TRD & Hall D Drift Chamber TRD prototypes
- **Secondary goal** (Hall D & eRD22): Characterization of GEM-TRD prototype
 - Study Additional e/π separation performance of the prototype
 - First opportunity for π beam to test the GEM-TRD prototype
- **Third goal** (UVa eRD6): Characterization of μ RWELL prototype So far, never manage to properly run μ RWELL in real beam test condition
 - First attempt @ FNAL in July 2018: trouble seeing APV signal for most of the run during the test beam
 - Second attempt in Hall D @ JLab Spring 2019: Similar issues with getting the proper signal in the expected APV25 window frames
 - **The prototype performed well with x-Ray and cosmic at UVa both before and after these test beam flops, could not reproduce the effect**
 - Study the efficiency gain & uniformity across the active area
- APV25-SRS to read out the 2 GEM Trackers and μ RWELL prototype, JLab FADC 125MHz and pre-amp GAS-II for the TRDs prototypes
- Beam expected in the hall after Thanksgiving

